

571 Search History

FILE 'HOME' ENTERED AT 09:36:05 ON 04 JUN 2003

- L8 0 L7 AND ((BENZAMIDINE (S) AFFINITY) OR ((ELU!NT OR ELUT#####)
(S) (ARGININE OR GUANINE)))
- L9 0 L7 AND BENZAMIDINE (S) (SURFACE OR GEL OR IMMOBIL##### OR AFFINI
TY OR ADSORB####)

(FILE 'HOME' ENTERED AT 09:36:05 ON 04 JUN 2003)

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI,
BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA,
CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB,
DDFU, DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, ...' ENTERED AT 09:36:24 ON
04 JUN 2003

- L1 QUE TRYPSIN (S) AFFINITY
L2 QUE L1 AND (AMIDINE OR BENZAMIDINE OR ARGinine OR GUANINE)
L3 QUE TRYPSIN (P) STREPTOMYCES
L4 QUE L1 AND L3

FILE 'MEDLINE, CAPLUS, BIOSIS, LIFESCI, EMBASE, SCISEARCH' ENTERED AT
09:43:15 ON 04 JUN 2003

- L5 109 S L4
L6 49 DUP REM L5 (60 DUPLICATES REMOVED)
L7 47 S L6 NOT PY>2001
L8 0 S L7 AND ((BENZAMIDINE (S) AFFINITY) OR ((ELU!NT OR ELUT#####)
L9 0 S L7 AND BENZAMIDINE (S) (SURFACE OR GEL OR IMMOBIL##### OR AFF
L10 3 S L7 AND BENZAMIDINE
L11 6 S L7 AND (ARGININE OR GUANINE OR AMIDINE)
L12 3 S L11 NOT L10
L13 41 S L7 NOT (L10-L12)
L14 4 S L13 AND (SPECIFIC (A) ACTIVITY)

L10 ANSWER 1 OF 3 MEDLINE
AN 2001128152 MEDLINE
DN 21010742 PubMed ID: 11126764
TI Anionic **trypsin** from chum salmon: activity with p-amidinophenyl ester and comparison with bovine and **Streptomyces griseus trypsins**.
AU Sekizaki H; Itoh K; Murakami M; Toyota E; Tanizawa K
CS Faculty of Pharmaceutical Sciences, Health Sciences University of Hokkaido, Japan.
SO COMPARATIVE BIOCHEMISTRY AND PHYSIOLOGY. PART B, BIOCHEMISTRY AND MOLECULAR BIOLOGY, (2000 Nov) 127 (3) 337-46.
Journal code: 9516061. ISSN: 1096-4959.
CY England: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200103
ED Entered STN: 20010404
Last Updated on STN: 20010404
Entered Medline: 20010301
AB An anionic **trypsin** from pyloric caeca of chum salmon (*Oncorhynchus keta*) was purified by ammonium sulfate and acetone fractionation followed by **affinity** chromatography, gel-filtration, and DEAE-anion exchange chromatography. The apparent molecular mass was about 24 kDa as determined by SDS-PAGE. The anionic chum salmon **trypsin** was moderately active toward esterase substrates such as tosyl-L-arginine methyl ester and tosyl-L-lysine methyl ester. Its amidase activity for benzoyl-L-arginine p-nitroanilide was comparative to those of bovine and **Streptomyces griseus trypsins**. Kinetic characteristics of anionic chum salmon, bovine, and **Streptomyces griseus trypsins** toward inverse substrate (p-amidinophenyl ester) were compared. Inverse substrate behaved as a specific substrate for anionic chum salmon **trypsin** with specific binding, efficient acylation, and relatively slow deacylation.

L10 ANSWER 2 OF 3 MEDLINE
AN 86059843 MEDLINE
DN 86059843 PubMed ID: 3934203
TI High-performance **affinity** chromatography of **trypsins** on Asahipak GS-gel coupled with p-aminobenzamidine.
AU Ito N; Noguchi K; Shimura K; Kasai K
SO JOURNAL OF CHROMATOGRAPHY, (1985 Sep 27) 333 (1) 107-14.
Journal code: 0427043. ISSN: 0021-9673.
CY Netherlands
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 198601
ED Entered STN: 19900321
Last Updated on STN: 19900321
Entered Medline: 19860115
AB An adsorbent for high-performance **affinity** chromatography of **trypsins** was prepared, based on a micro-particulate polyvinyl alcohol gel for high-performance liquid chromatography, Asahipak GS-gel. After the hydroxyl groups had been activated with 1,1'-carbonyldimidazole, 6-aminohexanoic acid was coupled as a spacer, then p-aminobenzamidine, a specific ligand for **trypsin**-family enzymes, was immobilized on the spacer. Fluorometric detection of eluted protein and on-line assay of enzyme activity using a fluorogenic

substrate, peptidylmethylcoumarylamide, made it possible to attain very high sensitivity. Microgram amounts of bovine **trypsin** and **Streptomyces griseus trypsin** could easily be analyzed in a short time (less than 1 h).

L10 ANSWER 3 OF 3 MEDLINE
AN 76120457 MEDLINE
DN 76120457 PubMed ID: 2582
TI **Affinity** chromatography of **trypsin** and related enzymes. I. Preparation and characteristics of an **affinity** adsorbent containing tryptic peptides from protamine as ligands.
AU Kasai K; Ishii S
SO JOURNAL OF BIOCHEMISTRY, (1975 Oct) 78 (4) 653-62.
Journal code: 0376600. ISSN: 0021-924X.
CY Japan
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 197604
ED Entered STN: 19900313
Last Updated on STN: 19950206
Entered Medline: 19760423
AB An absorbent for the **affinity** chromatography of **trypsin** [EC 3.4.21.4] (AP Sepharose) was prepared. The ligand was a mixture of oligopeptides (mainly di- and tripeptides) containing L-arginine as carboxyl termini, and was obtained from a tryptic digest of protamine. **Trypsin** was absorbed at relatively low pH (7-4), but was not absorbed at the optimum pH of catalysis (8.2). This was clearly explained on the basis of the pH dependence of the interaction of **trypsin** with its products. Inactivated **trypsin**, trypsinogen, and chymotrypsin were not absorbed. The absorption of active **trypsin** was interferred with by either **benzamidine** or urea. From these observations, it is evident that AP Sepharose is an affinity adsorbent. AP Sepharose was useful for purification of commercial bovine **trypsin**. A preliminary application for the purification of **Streptomyces griseus trypsin** was also successful.

L12 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2003 ACS
AN 1975:1569 CAPLUS
DN 82:1569
TI Proteolytic enzymes of the K-1 strain of **Streptomyces** griseus obtained from a commercial preparation (pronase). VI. Stabilization of the **trypsin** component by calcium and guanidine
AU Russin, David J.; Floyd, Benjamin F.; Toomey, Thomas P.; Brady, Al H.; Awad, William M., Jr.
CS Sch. Med., Univ. Miami, Miami, FL, USA
SO Journal of Biological Chemistry (1974), 249(19), 6144-8
CODEN: JBCHA3; ISSN: 0021-9258
DT Journal
LA English
AB **Streptomyces** griseus **trypsin** was more thermolabile than the 2 other components in pronase which was homologous with bovine chymotrypsin. It was completely inactivated after heating to 60.degree. for 15 min. The heat stability of the enzyme was reduced in the presence of EDTA. Ca was the specific cation which stabilized the enzyme at higher temps. This **trypsin** denatured irreversibly in 8M urea (at 23.degree.) in low Ca²⁺ concn., but was stable and active in this denaturant if 0.5M Ca²⁺ was present. This latter property makes this enzyme a possibly useful agent in protein structural studies. Both the microbial and bovine **trypsin** bound guanidinium ion substantially. Guanidinium ion competitively inhibited the activity of each enzyme against N.alpha.-benzoyl-L-**arginine**-p-nitroanilide (I). Microbial **trypsin** had about 3-fold greater affinity for guanidine and about a 20-fold lower Km for I than did bovine, **trypsin**. Binding of guanidine with either enzyme produced no apparent inhibition of activity against the poor nonspecific substrate, p-nitrophenyl acetate, when compared to inhibitor-free solns. These findings suggest that guanidine assocs. with that part of the specificity site which binds the charged portion of basic substrate residues. The addn. of 0.2M guanidine-HCl to an 8M urea-10mM CaCl₂ soln. completely inhibited the autolysis of the microbial **trypsin** but only slightly decreased the rate of autolysis of the bovine enzyme. In 8M urea-10mM CaCl₂ and 1.0M guanidine-HCl, .apprx.90% of the activity of the microbial enzyme was retained after 2 hr even in the presence of another S. griseus serine endopeptidase known to be active and stable in this mixed denaturant soln. Therefore, guanidine appears to stabilize microbial **trypsin**. In the presence of Na EDTA and denaturant mixt., the microbial enzyme rapidly lost activity. Measurements of CD were made at pH 8 and revealed that 0.45M CaCl₂ completely protected the microbial enzyme against rapid unfolding by 8M urea, whereas this salt had little effect upon the rapid conformational transition of the bovine enzyme in this denaturant. Also 0.2M guanidine with a low Ca²⁺ concn. could largely stabilize in 8M urea the conformation of the microbial enzyme. A study was carried out to see if the guanidine complex of either **trypsin** could demonstrate a changed specificity toward N-acylaminoacyl-p-nitroanilides. The results were entirely neg.

L12 ANSWER 2 OF 3 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AN 1979:38590 BIOSIS
DN BR16:38590
TI N SUBSTITUTED **ARGININE** CHLOROMETHYL KETONES.
AU KEIL B
SO JAKOBY, WILLIAM B. AND MEIR WILCHEK (ED.). METHODS IN ENZYMOLOGY, VOL. XLVI. AFFINITY LABELING. XXVI+774P. ILLUS. ACADEMIC PRESS: NEW YORK, N.Y., USA; LONDON, ENGLAND. 1977 (RECD 1978), 229-235.
ISBN: 0-12-181946-9.
FS BR; OLD

LA Unavailable

L12 ANSWER 3 OF 3 SCISEARCH COPYRIGHT 2003 THOMSON ISI
AN 2000:842430 SCISEARCH
GA The Genuine Article (R) Number: 370FC
TI Anionic **trypsin** from chum salmon: activity with p-amidinophenyl ester and comparison with bovine and **Streptomyces griseus trypsins**
AU Sekizaki H; Itoh K; Murakami M; Toyota E; Tanizawa K (Reprint)
CS HLTH SCI UNIV HOKKAIDO, FAC PHARMACEUT SCI, ISHIKARI, HOKKAIDO 061029, JAPAN (Reprint); HLTH SCI UNIV HOKKAIDO, FAC PHARMACEUT SCI, ISHIKARI, HOKKAIDO 061029, JAPAN
CYA JAPAN
SO COMPARATIVE BIOCHEMISTRY AND PHYSIOLOGY B-BIOCHEMISTRY & MOLECULAR BIOLOGY, (NOV 2000) Vol. 127, No. 3, pp. 337-346.
Publisher: PERGAMON-ELSEVIER SCIENCE LTD, THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND.
ISSN: 0305-0491.
DT Article; Journal
FS LIFE
LA English
REC Reference Count: 34
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS
AB An anionic **trypsin** from pyloric caeca of chum salmon (*Oncorhynchus keta*) was purified by ammonium sulfate and acetone fractionation followed by **affinity** chromatography, gel-filtration, and DEAE-anion exchange chromatography. The apparent molecular mass was about 24 kDa as determined by SDS-PAGE. The anionic chum salmon **trypsin** was moderately active toward esterase substrates such as tosyl-L-**arginine** methyl ester and tosyl-L-lysine methyl ester. Its amidase activity for benzoyl-L-**arginine** p-nitroanilide was comparative to those of bovine and **Streptomyces griseus trypsins**. Kinetic characteristics of anionic chum salmon, bovine, and **Streptomyces griseus trypsins** toward inverse substrate (p-amidinophenyl ester) were compared. Inverse substrate behaved as a specific substrate for anionic chum salmon **trypsin** with specific binding, efficient acylation, and relatively slow deacylation. (C) 2000 Elsevier Science Inc. All rights reserved.

L13 ANSWER 1 OF 41 MEDLINE
TI A mutant **trypsin**-like enzyme from **Streptomyces**
fradiae, created by site-directed mutagenesis, improves **affinity**
chromatography for protein **trypsin** inhibitors.

AU Katoh T; Kikuchi N; Nagata K; Yoshida N
SO APPLIED MICROBIOLOGY AND BIOTECHNOLOGY, (1996 Aug) 46 (1) 15-21.
Journal code: 8406612. ISSN: 0175-7598.

L13 ANSWER 2 OF 41 MEDLINE
TI Structure, distribution and composition of the extracellular matrix of
human oocytes and cumulus masses.
AU Dandekar P; Aggeler J; Talbot P
SO HUMAN REPRODUCTION, (1992 Mar) 7 (3) 391-8.
Journal code: 8701199. ISSN: 0268-1161.

L13 ANSWER 3 OF 41 MEDLINE
TI The inhibition of the enzymic activity of blood coagulation and
fibrinolytic serine proteases by a new leupeptin-like inhibitor, and its
structural analogues, isolated from **Streptomyces griseus**.
AU Chi C W; Liu H Z; Liu C Y; Chibber B A; Castellino F J
SO JOURNAL OF ANTIBIOTICS, (1989 Oct) 42 (10) 1506-12.
Journal code: 0151115. ISSN: 0021-8820.

L13 ANSWER 4 OF 41 MEDLINE
TI Membrane-associated hyaluronate-binding activity of chondrosarcoma
chondrocytes.
AU McCarthy M T; Toole B P
SO JOURNAL OF CELLULAR PHYSIOLOGY, (1989 Oct) 141 (1) 191-202.
Journal code: 0050222. ISSN: 0021-9541.

L13 ANSWER 5 OF 41 MEDLINE
TI A sepharose derivative coupled with a leupeptin-like peptide aldehyde,
glycylglycyl-L-argininal, and its use as an **affinity** adsorbent
for **trypsin**.
AU Nishikata M; Kasai K; Ishii S
SO BIOCHIMICA ET BIOPHYSICA ACTA, (1981 Aug 13) 660 (2) 256-61.
Journal code: 0217513. ISSN: 0006-3002.

L13 ANSWER 6 OF 41 MEDLINE
TI **Affinity** chromatography of **Streptomyces erythreus**
trypsin-like enzyme on Japanese quail ovomucoid.
AU Nagata K; Yoshida N
SO JOURNAL OF BIOCHEMISTRY, (1981 Apr) 89 (4) 1121-7.
Journal code: 0376600. ISSN: 0021-924X.

L13 ANSWER 7 OF 41 MEDLINE
TI Interaction of **trypsin**-like protease from **Streptomyces**
griseus with an immobilized inhibitor from kidney bean.
AU Mosolov V V; Fedurkina N V; Valueva T A
SO BIOCHIMICA ET BIOPHYSICA ACTA, (1978 Jan 12) 522 (1) 187-94.
Journal code: 0217513. ISSN: 0006-3002.

L13 ANSWER 8 OF 41 MEDLINE
TI **Affinity** chromatography of **trypsin** and related
enzymes. III. Purification of **Streptomyces** griseus
trypsin using an **affinity** adsorbent containing a tryptic
digest of protamine as a ligand.
AU Yokosawa H; Hanba T; Ishii S
SO JOURNAL OF BIOCHEMISTRY, (1976 Apr) 79 (4) 757-63.
Journal code: 0376600. ISSN: 0021-924X.

- L13 ANSWER 9 OF 41 MEDLINE
TI Isolation of a **trypsin**-like enzyme from **Streptomyces** paromomycinus (paromotrypsin) by **affinity** adsorption through Kunitz inhibitor-sepharose.
AU Chauvet J; Dostal J P; Acher R
SO INTERNATIONAL JOURNAL OF PEPTIDE AND PROTEIN RESEARCH, (1976) 8 (1) 45-55.
Journal code: 0330420. ISSN: 0367-8377.
- L13 ANSWER 10 OF 41 CAPLUS COPYRIGHT 2003 ACS
TI Expression and characterization of rat pancreatic secretory **trypsin** inhibitor-I and -II in *Saccharomyces cerevisiae*, and simple purification by **affinity** chromatography
AU Katoh, Takaaki; Horii, Toshihiko; Fujiwara, Takashi; Kikuchi, Norihisa; Shin, Masaru; Nagata, Kiyoshi; Yoshida, Nobuo; Miyasaka, Kyoko; Funakoshi, Akihiro
SO Journal of Fermentation and Bioengineering (1996), 82(5), 444-447
CODEN: JFBIEX; ISSN: 0922-338X
- L13 ANSWER 11 OF 41 CAPLUS COPYRIGHT 2003 ACS
TI Cloning and expression of **trypsin**-like enzyme from **Streptomyces** fradiae for comparative analysis of functional regions of **Streptomyces** and mammalian **trypsins**
AU Katoh, Takaaki; Kikuchi, Norihisa; Nagata, Kiyoshi; Yoshida, Nobuo
SO Journal of Fermentation and Bioengineering (1995), 80(5), 440-5
CODEN: JFBIEX; ISSN: 0922-338X
- L13 ANSWER 12 OF 41 CAPLUS COPYRIGHT 2003 ACS
TI Synthesis of N. α -[3H]acetyl-L-lysine chloromethyl ketone and its use in the fluorographic detection of proteases
AU Nishikata, Makoto
SO Analytical Biochemistry (1993), 214(1), 222-6
CODEN: ANBCA2; ISSN: 0003-2697
- L13 ANSWER 13 OF 41 CAPLUS COPYRIGHT 2003 ACS
TI The component separation and structure of thrombin inhibitor produced by **Streptomyces** S-254
AU Liu, Qiying; Liu, Huazhen; Chen, Wei; Chi, Zhengwu
SO Zhongguo Kangshengsu Zazhi (1990), 15(5), 342-6
CODEN: ZKZAEY; ISSN: 1001-8689
- L13 ANSWER 14 OF 41 CAPLUS COPYRIGHT 2003 ACS
TI Sperm-immobilizing antibody-inducing antigen and its use in birth control
IN Isojima, Shinzo
SO Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
- L13 ANSWER 15 OF 41 CAPLUS COPYRIGHT 2003 ACS
TI High-performance **affinity** adsorbents for **trypsin**-family enzymes prepared with TSKgel G3000PW
AU Kanamori, Akiko; Seno, Nobuko; Matsumoto, Isamu
SO Chemical & Pharmaceutical Bulletin (1987), 35(9), 3777-83
CODEN: CPBTAL; ISSN: 0009-2363
- L13 ANSWER 16 OF 41 CAPLUS COPYRIGHT 2003 ACS
TI Preparation of high-capacity **affinity** adsorbents using formyl carriers and their use for low- and high-performance liquid **affinity** chromatography of **trypsin**-family proteases
AU Kanamori, Akiko; Seno, Nobuko; Matsumoto, Isamu
SO Journal of Chromatography (1986), 363(2), 231-42
CODEN: JOCRAM; ISSN: 0021-9673

- L13 ANSWER 17 OF 41 CAPLUS COPYRIGHT 2003 ACS
TI Affinity gel titration: quantitative analysis of the binding equilibrium between immobilized protein and free ligand by a continuous titration procedure
AU Shimura, Kiyohito; Kasai, Kenichi
SO Analytical Biochemistry (1985), 149(2), 369-78
CODEN: ANBCA2; ISSN: 0003-2697
- L13 ANSWER 18 OF 41 CAPLUS COPYRIGHT 2003 ACS
TI Introduction of omega-carboxyl spacers onto cross-linked agarose gel beads by O-alkylation for the preparation of affinity adsorbents
AU Shimura, Kiyohito; Kasai, Kenichi
SO Journal of Chromatography (1984), 315, 161-6
CODEN: JOCRAM; ISSN: 0021-9673
- L13 ANSWER 19 OF 41 CAPLUS COPYRIGHT 2003 ACS
TI Affinophoresis of trypsins. Electrophoresis of trypsins in the presence of a soluble polyelectrolyte bearing affinity ligand
AU Shimura, Kiyohito; Kasai, Kenichi
SO Electrophor. '83 [Eighty-Three], Adv. Methods, Biochem. Clin. Appl., Proc. Int. Conf., 4th (1984), Meeting Date 1983, 619-25. Editor(s): Hirai, Hidematsu. Publisher: de Gruyter, Berlin, Fed. Rep. Ger.
CODEN: 51YDAV
- L13 ANSWER 20 OF 41 CAPLUS COPYRIGHT 2003 ACS
TI Light sensitization of a microbial protease
AU Kuan, Kenneth N.; Lee, Y. Y.; Melius, Paul
SO Journal of Applied Biochemistry (1982), 4(4), 384-90
CODEN: JABIDV; ISSN: 0161-7354
- L13 ANSWER 21 OF 41 CAPLUS COPYRIGHT 2003 ACS
TI Isolation of the chymotrypsin inhibitor from honey locust seeds
AU Mosolov, V. V.; Valueva, T. A.; Kolosova, G. V.
SO Biokhimiya (Moscow) (1982), 47(12), 2015-21
CODEN: BIOHAO; ISSN: 0006-307X
- L13 ANSWER 22 OF 41 CAPLUS COPYRIGHT 2003 ACS
TI Affinophoresis of trypsins
AU Shimura, Kiyohito; Kasai, Kenichi
SO Journal of Biochemistry (Tokyo, Japan) (1982), 92(5), 1615-22
CODEN: JOBIAO; ISSN: 0021-924X
- L13 ANSWER 23 OF 41 CAPLUS COPYRIGHT 2003 ACS
TI Streptomyces rimosus alkaline and trypsin-like serine proteinases
AU Renko, M.; Longer, M.; Pokorny, M.; Turk, V.; Vitale, L.
SO Proteinases Their Inhibitors: Struct., Funct. Appl. Aspects, Proc. Int. Symp. (1981), Meeting Date 1980, 195-200. Editor(s): Turk, Vito; Vitale, Ljubinka. Publisher: Mladinska Knjiga, Ljubljana, Yugoslavia.
CODEN: 46QWA4
- L13 ANSWER 24 OF 41 CAPLUS COPYRIGHT 2003 ACS
TI Rapid purification of Streptomyces griseus trypsin by immobilized rice bran trypsin inhibitor
AU Tashiro, Misao; Sugihara, Nobuo; Maki, Zensuke; Kanamori, Masao
SO Agricultural and Biological Chemistry (1981), 45(2), 519-21
CODEN: ABCHA6; ISSN: 0002-1369
- L13 ANSWER 25 OF 41 CAPLUS COPYRIGHT 2003 ACS

- TI **Affinity chromatography of trypsins** on Kunitz inhibitor linked to Sepharose
AU Chauvet, Jacqueline; Acher, Roger
SO Biochimie (1973), 55(10), 1323-4
CODEN: BICMBE; ISSN: 0300-9084
- L13 ANSWER 26 OF 41 CAPLUS COPYRIGHT 2003 ACS
TI Proteolytic enzymes of the K1 strain of *Streptomyces griseus* obtained from a commercial preparation (Pronase). Purification and characterization of the aminopeptidases
AU Vosbeck, Klaus D.; Chow, Kai-Fu; Awad, William M., Jr.
SO Journal of Biological Chemistry (1973), 248(17), 6029-34
CODEN: JBCHA3; ISSN: 0021-9258
- L13 ANSWER 27 OF 41 CAPLUS COPYRIGHT 2003 ACS
TI Trypsin treatment of adipocytes. Effect on sensitivity to insulin
AU El-Allawy, R. M. M.; Gliemann, J.; Hjeresen, Gurli
SO Biochimica et Biophysica Acta (1972), 273(1), 97-109
CODEN: BBACAO; ISSN: 0006-3002
- L13 ANSWER 28 OF 41 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
TI Purification of the two-enzyme system catalyzing the oxidation of the D-proline residue of pristinamycin II-B during the last step of pristinamycin II-A biosynthesis.
AU Thibaut, Denis (1); Ratet, Nathalie; Bisch, Didier; Faucher, Didier; Debussche, Laurent; Blanche, Francis
SO Journal of Bacteriology, (1995) Vol. 177, No. 18, pp. 5199-5205.
ISSN: 0021-9193.
- L13 ANSWER 29 OF 41 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
TI PURIFICATION AND CHARACTERIZATION OF TWO FORMS OF CYCLIC GMP-DEPENDENT PROTEIN KINASE FROM BOVINE AORTA.
AU LINCOLN T M; THOMPSON M; CORNWELL T L
SO J BIOL CHEM, (1988) 263 (33), 17632-17637.
CODEN: JBCHA3. ISSN: 0021-9258.
- L13 ANSWER 30 OF 41 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
TI MOLECULAR AND FUNCTIONAL PROPERTIES OF PROTEIN SS-1 FROM SMALL RIBOSOMAL SUBUNITS OF *STREPTOMYCES-AUREOFACIENS*.
AU MIKULIK K; SMARDOVA J; JIRANOVA A; BRANNY P
SO EUR J BIOCHEM, (1986) 155 (3), 557-564.
CODEN: EJBCAI. ISSN: 0014-2956.
- L13 ANSWER 31 OF 41 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
TI AFFINOPHORESIS OF TRYPSINS WITH AN ANIONIC AFFINOPHORE.
AU SHIMURA K; KASAI K-I
SO BIOCHIM BIOPHYS ACTA, (1984) 802 (1), 135-140.
CODEN: BBACAO. ISSN: 0006-3002.
- L13 ANSWER 32 OF 41 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
TI INTERACTION BETWEEN **TRYPSIN-LIKE ENZYME** FROM **STREPTOMYCES-ERYTHRAEUS** AND JAPANESE QUAIL OVO MUROID.
AU NAGATA K; YOSHIDA N
SO J BIOCHEM (TOKYO), (1983) 93 (3), 909-920.
CODEN: JOBIAO. ISSN: 0021-924X.
- L13 ANSWER 33 OF 41 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
TI PURIFICATION AND CHARACTERIZATION OF A FOLATE BINDING PROTEIN FROM PORCINE CHOROID PLEXUS.
AU SULEIMAN S A; SPECTOR R
SO ARCH BIOCHEM BIOPHYS, (1981) 208 (1), 87-94.

CODEN: ABBIÀ4. ISSN: 0003-9861.

- L13 ANSWER 34 OF 41 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
TI PARTIAL PURIFICATION AND CHARACTERIZATION OF A FOLATE BINDING PROTEIN FROM HUMAN CHOROID PLEXUS.
AU SULEIMAN S A; SPECTOR R; CANCELLA P
SO NEUROCHEM RES, (1981) 6 (3), 333-341.
CODEN: NEREDZ. ISSN: 0364-3190.
- L13 ANSWER 35 OF 41 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
TI **AFFINITY** CHROMATOGRAPHY OF **TRYPSIN** EC-3.4.21.4 AND RELATED ENZYMES PART 5 BASIC STUDIES OF QUANTITATIVE **AFFINITY** CHROMATOGRAPHY.
AU KASAI K-I; ISHII S-I
SO J BIOCHEM (TOKYO), (1978) 84 (5), 1051-1060.
CODEN: JOBIAO. ISSN: 0021-924X.
- L13 ANSWER 36 OF 41 LIFESCI COPYRIGHT 2003 CSA
TI Studies on Fibrinolytic Serine **Trypsin**-Like Enzymes From **Streptomyces**.
AU Buckley, D.E.; Jeffries, L.
SO FEMS MICROBIOL. LETT., (1981) vol. 12, no. 4, pp. 405-408.
- L13 ANSWER 37 OF 41 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.
TI Subcellular distribution, properties and interrelationship of oestrogen receptors in endometrium and other target tissues.
AU Jungblut P.W.; Hekim N.; Meyer H.H.D.; et al.
SO Journal of Clinical Chemistry and Clinical Biochemistry, (1983) 21/8 (473-480).
CODEN: JCCBDT
- L13 ANSWER 38 OF 41 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.
TI Affinity labeling of steroid binding sites. Study of the active site of 20.beta. hydroxysteroid dehydrogenase with 2.alpha. bromoacetoxyprogesterone and 11.alpha. bromoacetoxyprogesterone.
AU Strickler R.C.; Sweet F.; Warren J.C.
SO Journal of Biological Chemistry, (1975) 250/19 (7656-7662).
CODEN: JBCHA3
- L13 ANSWER 39 OF 41 SCISEARCH COPYRIGHT 2003 THOMSON ISI
TI **AFFINITY**-CHROMATOGRAPHY OF **STREPTOMYCES**-ERYTHREUS **TRYPSIN**-LIKE-ENZYME ON JAPANESE QUAIL OVOMUCOID
AU NAGATA K (Reprint); YOSHIDA N
SO JOURNAL OF BIOCHEMISTRY, (1981) Vol. 89, No. 4, pp. 1121-1127.
- L13 ANSWER 40 OF 41 SCISEARCH COPYRIGHT 2003 THOMSON ISI
TI **AFFINITY** CHROMATOGRAPHY OF **TRYPSIN** AND RELATED ENZYMES .3. PURIFICATION OF **STREPTOMYCES**-GRISEUS **TRYPSIN** USING AN **AFFINITY** ADSORBENT CONTAINING A TRYPTIC DIGEST OF PROTAMINE AS A LIGAND
AU YOKOSAWA H (Reprint); HANBA T; ISHII S
SO JOURNAL OF BIOCHEMISTRY, (1976) Vol. 79, No. 4, pp. 757-763.
- L13 ANSWER 41 OF 41 SCISEARCH COPYRIGHT 2003 THOMSON ISI
TI ISOLATION OF A **TRYPSIN**-LIKE-ENZYME FROM **STREPTOMYCES**-PAROMOMYCINUS (PAROMOTRYPSIN) BY **AFFINITY** ADSORPTION THROUGH KUNITZ INHIBITOR-SEPHAROSE
AU CHAUVET J (Reprint); DOSTAL J P; ACHER R
SO INTERNATIONAL JOURNAL OF PEPTIDE AND PROTEIN RESEARCH, (1976) Vol. 8, No. 1, pp. 45-55.

L14 ANSWER 1 OF 4 MEDLINE
AN 76120060 MEDLINE
DN 76120060 PubMed ID: 1248926
TI Isolation of a **trypsin**-like enzyme from **Streptomyces** paromomycinus (paromotrypsin) by **affinity** adsorption through Kunitz inhibitor-Sepharose.
AU Chauvet J; Dostal J P; Acher R
SO INTERNATIONAL JOURNAL OF PEPTIDE AND PROTEIN RESEARCH, (1976) 8 (1) 45-55.
Journal code: 0330420. ISSN: 0367-8377.
CY Denmark
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
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AB A **trypsin**-like enzyme has been isolated from the filtrate of a **Streptomyces rimosus** forma paromomycinus culture. Purification involves acetone fractionated precipitation, ultrafiltration on a Diaflo UM 10 membrane and **affinity** adsorption on to Kunitz pancreatic **trypsin** inhibitor linked to Sepharose. The **trypsin**-like enzyme (paromotrypsin) appears homogeneous by zone electrophoresis on gelatinized cellulose acetate. **Specific activity** toward Tos-Arg-OMe, calculated from amino acid analysis, is about 220 mu mg-1. The overall yield in activity is about 30%. The molecular weight of the **trypsin**-like enzyme, determined by gel filtration, is around 22,000-25,000 daltons. Electrophoretic migration on cellulose acetate strips indicates an isoelectric point around 8. Amino acid composition has been determined; the protein comprises about 210 residues on the basis of a single histidine residue per molecule. Paromotrypsin is unstable in acidic medium and is not stabilized by calcium ions. Enzymic activity towards Bz-Argo-OEt is not increased by the addition of calcium ion in contrast to the activating effect observed on bovine **trypsin**. Paromotrypsin is inhibited by TLCK and NPGB; it interacts with naturally occurring bovine **trypsin** inhibitors such as soya bean and Kunitz pancreatic inhibitors, but not with chicken ovomucoid. Proteolytic specificity, examined by hydrolysis of oxidized Kunitz pancreatic inhibitor and characterization of resulting peptides, seems similar to that of bovine **trypsin**.

L14 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2003 ACS
AN 1981:152455 CAPLUS
DN 94:152455
TI Rapid purification of **Streptomyces griseus** **trypsin** by immobilized rice bran **trypsin** inhibitor
AU Tashiro, Misao; Sugihara, Nobuo; Maki, Zensuke; Kanamori, Masao
CS Fac. Living Sci., Kyoto Prefect. Univ., Kyoto, 606, Japan
SO Agricultural and Biological Chemistry (1981), 45(2), 519-21
CODEN: ABCHA6; ISSN: 0002-1369
DT Journal
LA English
AB The **trypsin** activity of *S. griseus* Pronase-P was purified to homogeneity on an **affinity** column of rice bran **trypsin** inhibitor immobilized on CNBr-activated Sepharose 4B. The enzyme was eluted at acidic pH and showed only 1 component on SDS-gel electrophoresis. Purified trypsin had a relatively high **sp. activity** for trypsin substrates and no exopeptidase activity. The preparative method was rapid and highly efficient.